**Assignment-2**

**Answer Key**

**Q2. Find the meaning of the statement (-PVQ)&R→SV(-R&Q)**

**for each of the interpretations given below.**

* **(a). *I1* : P is true, Q is true, R is false, S is true.**
* **(b). *I2* : P is true, Q is false, R is true, S is true.**

**(a) ANS**: Find the meaning of the following statement: (-PVQ)&R→SV(-R&Q) for the interpretation given bellow(a). *I1* : P is true, Q is true, R is false, S is true.

* ˜Q is false**.**
* **(~P V Q)** is **true**.

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* R is false.
* **(-PVQ)&R** is **false**.
* (-R&Q) is true.
* S is true.
* SV(-R&Q) is **true**.
* **(-PVQ)&R→SV(-R&Q)** is **true**.

(b) ANS: Find the meaning of the following statement: (~PVQ)&R→SV(~R&Q) for the interpretation given bellow *I2* : P is true, Q is false, R is true, S is true.

* P is true
* ~**P** is false.
* **(**~**P V Q)** is **false**.
* (~PVQ)&R as **false**.
* R is true.
* ~R is false.
* (~R&Q) is **false**.
* SV(~R&Q) is **true**.
* (~PVQ)&R→SV(~R&Q) is **true**.